

REMARKS

Claims 1 - 37 are in the application and presented for consideration. By this Amendment, Applicant has made minor changes to claims 1, 22 and 37.

The changes to claim 1 include a rewording of the claim, maintaining substantially the same scope, in order to move any functional or result recitation to the end of the claim. Additionally, the claim has been changed to highlight that the means for generating a gas volume flow generates a flow which is different from the breathing gas flow of the breathing gas circuit. It is Applicant's position that this was initially clear in that two different gas flows were mentioned in the original claim as well as the breathing gas circuit which was different from the means for generating a gas volume flow admitted in an outer surface of the absorber. Nevertheless, with these changes, there should be no issue as to the interpretation of the claim and there should be no issues with regard to the applicability of the cited prior art. Claim 22 was also changed to indicate that the cooling gas volume flow is separate from the flow of breathing gas. Again, it is believed that the claim was initially clear that the breathing gas and the cooling flow are not the same flow. Nevertheless, this is now clear in the claim as presented. A similar change was made to claim 37.

Applicant's representative wishes to thank Examiner Patel for the courtesy of a brief telephone discussion on March 22, 2005. Claim 1 and the applicability of Lemoine (U.S. 1,983,475) were discussed.

Claims 1, 3, 5, 8, 18, 22, 26, 35, 36 and 37 have been rejected as being obvious based on the teachings of Lemoine (U.S. Patent 1,983,475) in view of Conzen. The rejection was

presented based on the position that Lemoine discloses the invention as claimed with the exception of using calcium hydroxide in the absorber.

Lemoine discloses a breathing apparatus with a flexible storage pocket end that fits on a cooler i. The cooler has flow passages j. The storage pocket n has a flap valve, r, o as well as a connection p and a manifold. An exit of the flow passages j has a flap valve m, q. Liquid coolant is in the cooler i such that breathing gas passing therethrough will be somewhat cooled. The breathing apparatus of Lemoine also includes a casing a with a mesh surface. A central gas passage is provided whereby gas may pass through the central gas passage, pass radially through material in the casing a and subsequently flow through the cooler i. The central passage f has a series of sieves gg¹ which are heated by their connection to a cover b which is in turn connected to the casing a. A breathing connection d is provided. The entire construction is part of a breathing gas circuit with an absorber with breathing gas flowing therethrough. The circuit is completed with connection d and the connection at p. As such, it can be said that Lemoine fails to teach several features of the invention, namely the means for generating a gas volume flow with gas flow admitted to an outer surface of the absorber and the reference fails to disclose an evaporating agent delivery means for delivering agent from an agent reservoir via a connection line to the outer surface of the absorber by admitted pressure to the reservoir.

Although it is not stated in the rejection, the rejection is based on the concept that Lemoine discloses the means for generating the gas volume flow and the evaporating agent delivery means as the human user that is part of the breathing gas circuit. Lemoine provides

the sieves g in a position where they are heated such that exhaled breathing gas, which may contain water/saliva droplets, passes there through and the droplets evaporate so as to not harm the absorber. However, this is not a delivery means delivering evaporating agent to the outer surface of the absorber and there is no reservoir of evaporating agent and no connection line from the reservoir to the outer surface of the absorber and no agent delivery device. Further, the human exhales air which flows through connection d (such that saliva/water is evaporated at sieves g, g¹). This is not a means for generating a gas volume flow of at least 60L per minute and particularly is not a means for generating a gas volume flow admitted to the outer surface of the absorber. Nevertheless, to remove any issues with regard to the human being the means for generating a gas volume flow or the human being an evaporating agent delivery means, Applicant has clarified the independent claims with regard to the generated gas volume flow (cooling flow) being separate from the flow of breathing gas with the evaporating agent delivery means delivering liquid agent via a connection line from the agent reservoir which contains liquid evaporating agent. Lemoine clearly does not teach each feature as specified in the claims. Further, as Lemoine is only trying to screen or prevent liquid or saliva droplets from entering into the absorber, Lemoine clearly does not teach and clearly does not suggest cooling the outside of a calcium hydroxide absorber with a high volume cooling flow and delivering liquid evaporating agent from a liquid reservoir to this outer surface for cooling. Lemoine clearly does not teach these two features in addition to a breathing gas circuit.

The secondary reference simply provides discussion as to the use of CO₂ absorbers. The reference provides no teachings and no suggestions with regard to the breathing circuit in

combination with the directed cooling gas flow means and particular evaporating agent means as claimed.

Each of the independent claims as now presented includes a combination of features which is clearly neither taught nor suggested by the prior art including Lemoine. As such, the claims as presented including all dependent claims are now in condition for allowance.

Applicant further notes that the Examiner has held that there is no criticality with regard to the gas flow volume rate of at least 60L per minute as per claims 1 and 22. Applicant notes that the specification clearly indicates that this rate of flow can be important with regard to generating an amount of convection air necessary for heat transport (see for example paragraph [0010] at page 4). The criticality of this feature is certainly discussed. Further, this demonstrates how Lemoine clearly fails to provide any teaching or suggestion of the features claimed. Lemoine uses a breathing gas circuit and has no suggestion with regard to directing a cooling flow on the outer surface which outer surface is also provided with liquid evaporating agent. Further, as the human users breathing rate would not be anywhere near the claimed flow rate, Lemoine could not possibly achieve the results achieved according to the invention.

Applicant respectfully requests that the Examiner reconsider the outstanding rejection and favorably consider the claims as now presented.

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